

Inventor: Grunow, et al.
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In the Specification

Please amend paragraph 0041 as shown below:

[0041] Finally, Fig. 2E illustrates the state of the art. ~~This disclosure describes methods and apparatus that address one or more of the issues noted above. In at least some embodiments, a via is formed between first and second layer copper lines by depositing a first barrier layer over the inner wall and bottom surfaces of the via, then selectively removing the first barrier layer from the bottom surface of the via, and then depositing a second layer made of material that also forms a barrier to copper migration ensures sufficient wettability of copper and, is relatively less resistive than the first barrier layer. In at least some embodiments, the selective removal of the barrier layer from the bottom of the via may be performed in the same processing chamber as the deposition of the second layer.~~ f the stacked structure 50, 50a after a Cu or Cu-alloy seed deposition and/or Cu ECD fill process that leads to the vias 180, 180a and trenches 200, 200a being filled with copper or copper alloy 402. As can be seen, the flash barrier layer 400 on the bottoms of the vias 180, 180a provides a copper diffusion barrier to prevent migration through the misaligned areas 240, 240a. The flash barrier layer 400 further provides adequate if not improved wettability of the copper 402 to the barrier 400 of the vias 180, 180a and the trenches 200, 200a.